

## ABSTRACT OF THE DISCLOSURE

A method and an apparatus of memory access request priority queue arbitration comprises sorting the requests into plurality of different priority levels firstly. The priority queues of different priority levels are arranged respectively according to the following steps: counting the cycles and latencies of each access request; counting the total cycles; comparing the latencies of each access request and total cycles respectively, if the total cycles is larger than the latency of a request, then arranging one more the same request in the priority queue, else executing the priority queue in order.